



HS 300 Pre-Heater Operations Manual

1. Packing Contents (P/N 8007-0343 or 8007-0345)

- a. HS 300 Pre-Heater
- b. Power Cord



- c. 5 PCB Support Pins
- d. 4 PCB Holder Pins
- e. 3 PCB Support Rails

2. Specification

- a. Power: 120 VAC, 60 Hz or 230VAC 50 Hz.
- b. Heater Type: Radiant, 400 Watt (200 W x 2), closed loop, thermo-couple control
- c. Temperature: 212 °F (100 °C) – 450 °F (230 °C)
Range
- d. Dimensions: 13.8" (350 mm) W x 2.5" (62mm) H x 11.6" (295mm) D
- e. Weight: 8.8 pounds (4.0 kg)

3. Safety Information

- a. Do not contact the Heater or its peripheral parts during operation.
- b. Once turned off, let the unit cool completely before contacting.
- c. After use, verify that the green LED is off.
- d. When using Fluxes, use fume extraction equipment or use in a well ventilated area to minimize operator exposure to fumes.

4. Set-up and Operation

- a. Connect the power cord to the power inlet on the HS 300 and then to an appropriate power supply. See Figure 3.
- b. Always use the PCB Support Rails and Holder Pins. When needed, the Support Pins can be used to prevent the PCB from warping
- c. Set up of PCB Holder:
 - i. Use two Support Rails and all Four Holder Pins.
 - ii. Each Support Rail has two grooves on the back, which are used to secure the PCB Holder Pins in place.
 - iii. To affix the PCB Holder Pins to the support rails, first remove the black nut from the Holder Pins.
 - iv. Place a black nut into one of the grooves on the back of a Support Rail. Thread the Holder Pin into the nut from the other side of the Support Rail.
 - v. Repeat for each slot on the two Support Rails.

Refer to Figure 2.

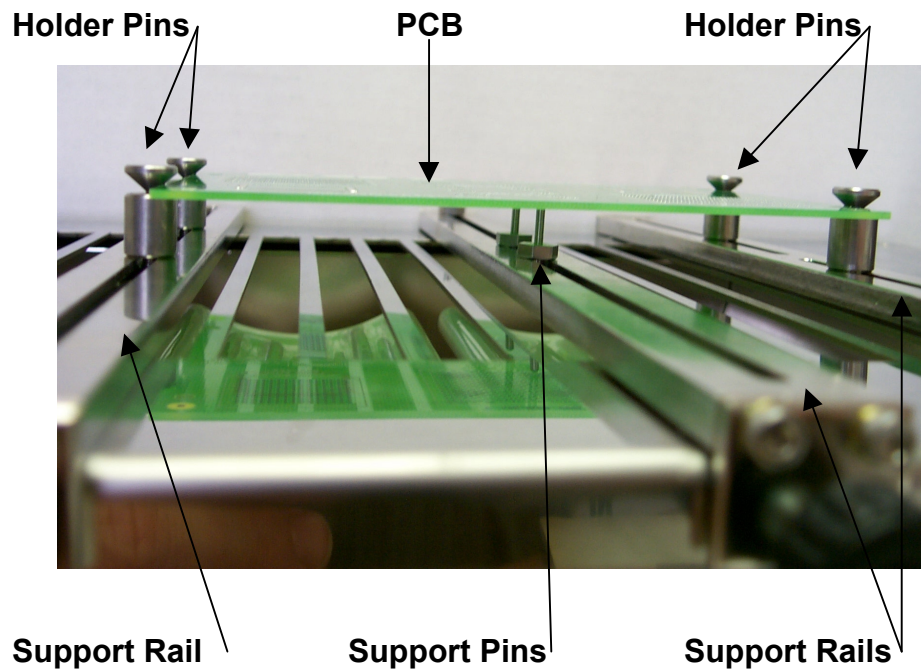


Figure 2.

- d. Loosen the Black knob on a Support Rail with the Holder Pins Installed.

- e. Place a Support Rail over the top of the HS 300 and make sure the far end of the Support Rail is placed over the back edge of the HS 300. See Figure 3.



Figure 3.

- f. Tighten the black knob on the Support Rail to secure rail to HS 300.
- g. To adjust the Support Rail, loosen the black knob and slide the Support Rails from side to side to match the width of the PCB.
- h. The Holder Pins can be adjusted by twisting the pins a quarter turn and sliding them back to front in their grooves on the Support Rails until properly positioned.

CAUTION: The Holder Pins will become hot during normal operation. Use a tool, gloves, or turn unit off and allow to cool before adjusting Holder Pins.

- i. The PCB can be slid into position. See Figure 4.

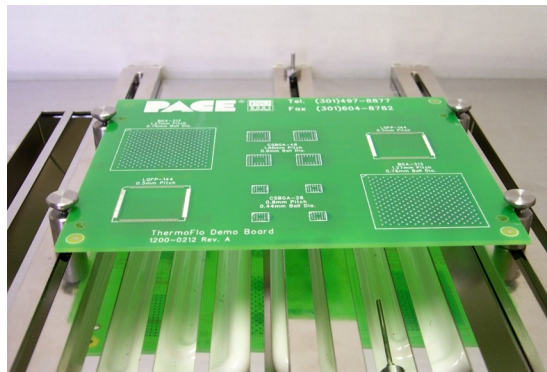


Figure 4.

- j. When working on Large PCBs, the use of the support pins is strongly recommended to prevent the PCB from warping.
- k. To use the Support Pins (Refer to Figure 2):
 - i. Select the third Support Rail and attach as many Support Pins as are needed.
 - ii. Support Pins are installed on the Support Rail in the same manner as the Holder Pins. See C-iii – C-iv above.
 - iii. The Support Pins are adjusted in the same way as the Holder Pins. See H above.
 - iv. Place the Support Rail fitted with the Support Pins over the HS 300 between the 2 existing Support Rails as in D-F above.
 - v. When Large PCBs are used, a Support Pin may be required on the edges in between the Holder Pins. It is recommended to use all 5 support pins when working on large PCBs. 2 Support Pins between the Holder Pins and three Pins on the Center Support Rail in the Center of the PCB.
- l. Turn on the Power Switch
- m. Set Temperature knob to desired setting. It will take approximately 10 minutes for the radiant heaters to reach their set temperature and stabilize. Use of a thermo-couple may be required to verify actual PCB temperatures.

5. Maintenance

- a. The HS 300 should be kept clean. If flux is spilled on the heaters, the HS 300 should be allowed to cool to room temperature and the heater panels can be wiped off with an appropriate flux cleaner.

Always unplug the HS 300 before removing the cover to clean the Heater Panels.

- b. Should a heater need to be replaced, please order two (2) P/N 6010-0104-P1 from your local PACE Distributor. It is always recommended to replace the heaters in pairs.
- c. To replace the heating panels:
 - i. Turn off the HS 300 and make sure it is completely cool.
 - ii. Unplug the HS 300 and disconnect the Power Cord
 - iii. Remove any installed Support Rails.
 - iv. Remove the 7 screws from the top of the HS 300.
 - v. Remove the metal cover.
 - vi. Locate the connector blocks on either side of the heaters and remove the clear plastic cover by loosening the 2 screws that secure the cover.

- vii. Remove the paper and then remove the two screws securing the white wires that connect to the Heaters.
- viii. Turn the HS 300 over, and remove the screws (4 each) that secure the heater assemblies to the HS 300.
- ix. Lift the heater assemblies from the HS 300.
- x. Remove the heater panel from its holder by loosening the 4 screws on the bottom side of the assembly.
- xi. Install the new heaters into their holders by sliding the base of the heater panel into the slot on the holder and tighten the 4 screws on each holder.
- xii. Thread the heater wire through the metal housing to the appropriate terminal block on the sides of the HS 300.
- xiii. Turn the unit over and re-install the screws that secure the heater assemblies to the HS 300 (4 for each heater)
- xiv. Turn the HS 300 back over (top up) and secure the white wires to the terminal block using the screws that were removed in step vi.
- xv. Replace the paper then replace the clear cover and tighten the cover screws.
- xvi. Replace the metal cover
- xvii. Replace the 7 cover screws.
- xviii. Reconnect to an appropriate power supply
- xix. Continue with normal use.